

DETAILED ACTION

The Examiner's decision to reject claims 1 - 8, 11 - 20, 22, and 23 under 35 U.S.C. § 102(e) is affirmed.

The Examiner's decision to reject claim 21 under 35 U.S.C. § 103(a) is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

In the event of further prosecution, we recommend that the Examiner ascertain whether the recitations of claim 21 would be unpatentable under 35 U.S.C. § 103(a). Specifically, we recommend that the Examiner ascertain whether the coupling of a general purpose computing platform to the claimed system would have been obvious.

AFFIRMED-IN-PART

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claim 21**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Rozenblit et al. (US Patent Number 6,104, 745) in view of Shinohara (US Patent Number 6,160,838).

Regarding claim 21, Rozenblit teaches a system further comprising a general purpose computing:

platform coupled to the first mixer 500, the second mixer 501, and the modulator 301, the general purpose computing platform decoding an incoming data signal from the in-phase 503 incoming data signal and the quadrature phase incoming data signal, and generating the outgoing data signal (see figure 8, col 20 lines 47-66). Shinohara clearly teaches the above limitation that is obvious and well known in the art. However, Examiner submit more evidence by adding Shinohahara. Shinohahra teaches a method of spread spectrum communication using the QPSK modulation system comprises: a delay step of applying, to one of the IQ () components, a time difference T_d with respect to the other component ($T_c \leq T_d \leq T/2$, where T_c is the spreading code chip period, and T is the symbol period); a modulation step of modulating the I component with a carrier signal and the Q component with a carrier signal to which is applied a prescribed phase difference; a transmission step of synthesizing and transmitting the modulated IQ components; a reception step of receiving the transmitted signal; a demodulating step of demodulating the received signal with a carrier signal and carrier signal to which a prescribed phase difference has been applied into respective IQ

components; and a step of the data using the vector of the received signal at time point t and the vector of the received signal at time point $(t+T_d)$ (col 4 lines 1-20). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention

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to combine the above teaching of Shinohara with Rozenblit, the carrier frequency error correction can be performed in the baseband, or der to reduce interference.

Conclusion

2. Any responses to this action should be mailed to:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELODY MEHRPOUR whose telephone number is 5(571)272-791313. The examiner can normally be reached on Mon-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah be reached (571) 272-7904.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/MELODY MEHRPOUR/

Primary Examiner, Art Unit 2617

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